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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/038,863 Filing Date: December 31, 2001 Appellant(s): OLSON ET AL.

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Group 3700

Richard Bridge For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed June 8, 2006 appealing from the Office action mailed August 25, 2005.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

No amendment after final has been filed.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

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(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

6,221,460

WEBER et al.

4-2001

5,797,892

GLAUG et al.

8-1998

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-5 and 7-17, 20 and 22-23 are rejected under

35 U.S.C. 102(a) as being anticipated by Weber et al. (US 6,221,460).

With reference to claim 1, Weber et al. (hereinafter "Weber") disclose a wetness indicator comprising a liquid permeable enclosure (40) having an interior volume and a liquid absorbent body (50) absorbing liquid in the presence thereof and having an unrestrained volume upon absorption of a preselected amount of liquid, said unrestrained volume of the absorbent body being substantially greater than the interior volume of the enclosure such that the absorbent body applies an expansion pressure to the enclosure upon absorption of said preselected amount of liquid, said enclosure limiting expansion of the absorbent body so that the wetness indicator stiffens as liquid is absorbed, said wetness indicator having a first stiffness when dry and a second

stiffness greater than said first stiffness upon absorption of said preselected amount of liquid as set forth in col. 7, lines 16 - 23.

Weber states that the dimensional change member comprises a superabsorbent material that absorbs at least 4 times its own weight. The topsheet (40) limits expansion of the absorbent body through its direct bonding to the underlying layer (figures 6a – 6e) and the absorbent body has a second stiffness upon absorption of the preselected amount of liquid that is greater than the first stiffness when dry as known as an inherent property of superabsorbent material.

With reference to claim 2, Weber discloses a generally elongate wetness indicator as shown in figures 4 - 5.

As to claim 3, Weber discloses an absorbent body comprising a sheet laid over itself at least once to form two folds as set forth in figure 6e.

With respect to claim 4, Weber discloses an absorbent body formed from thin sheet material fan folded longitudinally multiple times to form a multifold structure as set forth in figure 6a.

Regarding claim 5, Weber discloses a wetness indicator that is generally rounded upon absorption of said preselected amount of liquid as set forth in figures 2 - 3.

With reference to claims 7 and 8, Weber discloses an enclosure having at least two generally elongate and parallel chambers as set forth in figure 4.

As to claim 9, Weber discloses a wetness indicator wherein the enclosure comprises a liquid permeable lining (50) and a base layer (49) attached to the lining to from the chambers between the base layer and the liner as set forth in figure 4.

Regarding claim 10, Weber discloses a wetness indicator wherein the base layer (49) is bonded to the lining (50) along a series of parallel, spaced apart seams (42) as set forth in figure 4.

As to claim 11, Weber discloses the wetness indicator being used in combination with a garment and being positioned in a crotch region of the garment as set forth in figure 1.

With reference to claim 12, Weber discloses a garment with an inner surface facing a wearer when wearing the garment (40), and a wetness indicator positioned relative to the inner surface (50), said wetness indicator having a first stiffness when dry and a second stiffness greater than said first stiffness upon absorption of a preselected amount of liquid, said wetness indicator comprising a liquid permeable enclosure having an interior volume and a liquid absorbent body therein, the absorbent body having an unrestrained saturated volume greater than the interior volume of the liquid permeable enclosure as set forth in the rejection of claim 1.

With respect to claim 13, Weber discloses a garment wherein the wetness indicator is positioned in the garment to press on the inner thighs of the wearer as set forth in figure 1. The examiner contends that any device present in the crotch portion of a training pant, diaper, etc. will press on the inner thigh, among other areas, of the wearer due to the construction of the article.

As to claim 14, Weber discloses the garment as toilet training pants as set forth in col. 1, lines 14 – 18.

Regarding claim 15, Weber discloses a generally elongate wetness indicator in figure 4.

With reference to claims 16 - 17 and 22 - 23, Weber discloses the second stiffness as at least about five times greater than the first stiffness as set forth in col. 7, lines 21 - 23.

As to claim 20, Weber discloses the garment wherein the enclosure has at least two generally elongate and parallel chambers as set forth in figure 4.

Claims 1-2, 11-18, 22-24 and 30 are rejected under 35 U.S.C. 102(b) as being anticipated by Glaug et al. (US 5,797,892).

With reference to claim 1, Glaug et al. (hereinafter "Glaug") disclose a wetness indicator comprising a liquid permeable enclosure (52) having an interior volume and a liquid absorbent body (82) absorbing liquid in the presence thereof and having an unrestrained volume upon absorption of a preselected amount of liquid, said unrestrained volume of the absorbent body being substantially greater than the interior volume of the enclosure such that the absorbent body applies an expansion pressure to the enclosure upon absorption of said preselected amount of liquid, said enclosure limiting expansion of the absorbent body so that the wetness indicator stiffens as liquid is absorbed, said wetness indicator having a first stiffness when dry and a second stiffness greater than said first stiffness upon absorption of said preselected amount of

liquid as set forth disclose a wetness indicator for alerting a wearer to urination as set forth in col.15, line 40 to col. 16, line 41.

Glaug states that the dimensional change member is made of a compressed cellulose sponge (absorbent material) that expands to at least 2 times its dry dimension when exposed to an aqueous solution (hydraulic pressure). The topsheet (52) limits expansion of the absorbent body through its direct bonding to the support layer (col. 5, lines 34 - 38) and the absorbent body has a second stiffness upon absorption of the preselected amount of liquid that is greater than the first stiffness when dry as specifically taught in col. 16, lines 34 - 37.

As to claim 2, Glaug discloses a wetness indicator that is generally elongate as set forth in figure 6.

Regarding claim 11, Glaug discloses a wetness indicator in combination with a garment (20), said wetness indicator being positioned in a crotch region of the garment as set forth in figure 1.

With reference to claim 12, Glaug discloses a garment with an inner surface facing a wearer when wearing the garment (52), and a wetness indicator positioned relative to the inner surface for alerting a wearer when the inner surface has become wet with liquid (82), said wetness indicator having a first stiffness when dry and a second stiffness greater than said first stiffness upon absorption of a preselected amount of liquid, said wetness indicator comprising a liquid permeable enclosure having an interior volume and a liquid absorbent body therein, the absorbent body having an

unrestrained saturated volume greater than the interior volume of the liquid permeable enclosure as set forth in col. 15, line 40 to col. 16, line 41.

With respect to claim 13, Glaug discloses a garment wherein the wetness indicator is positioned in the garment to press on the inner thighs of the wearer as set forth in figure 1.

As to claim 14, Glaug discloses the garment as toilet training pants as set forth in col. 4, lines 37 – 44.

Regarding claim 15, Glaug discloses a generally elongate wetness indicator in figures 1 and 6.

With reference to claims 16 - 18, 22 - 24 and 30, Glaug discloses the second stiffness as at least about five times, or about ten times greater than the first stiffness as set forth in col. 15, lines 45 - 52.

Glaug discloses the sponge as a dimensional change member. The sponge, only one of the materials usable in this capacity, has a first stiffness (x) and a second stiffness (2x - 5x) that is greater than the first stiffness. See col. 15, lines 40 - 52.

The examiner interprets stiffness as it is defined by Webster's Ninth New Collegiate Dictionary. Stiffness is defined as lacking in responsiveness or impeded in movement. In light of the foregoing, the examiner contends that Glaug discloses a wetness indicator with a first dry stiffness and a second stiffness greater than the first because the delay in movement (i.e. absorption of fluids) in the wetness indicator is greater once liquid has been absorbed versus when the wetness indicator is dry.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Weber et al. (US 6,221,460).

The difference between Weber and claim 6 is the provision that the wetness indicator has a width between about one-fourth its length and three-fourth its length.

Weber teaches a wetness indicator having a width of $3\frac{1}{2}$ inches (col. 12, lines 50 - 52) and a length that may be varied.

It would have been obvious to one of ordinary skill in the art to modify the length of the wetness indicator in order to provide the desired crush resistance and ventilation as taught by Weber in col. 7, lines 24 – 35. Likewise, since the general conditions of the claim are disclosed in the prior art, discovering the optimum or workable range requires only a level of ordinary skill in the art.

Claims 25 – 28 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Glaug et al. (US 5,797,892).

With reference to claim 25, Glaug disclose an article for personal wear capable of alerting a wearer to the wearer's release of liquid body exudates, the article comprising a front region, a back region and a crotch region interconnecting the front and back regions and extending generally longitudinally therebetween (20) and a generally elongate wetness indicator positioned in the crotch region so as to come in contact with the liquid body exudates (22), said wetness indicator having a first stiffness when dry (x) and a second stiffness greater than the first stiffness upon absorption of a preselected amount of the liquid body exudates (5x).

Glaug discloses the sponge as a dimensional change member. The sponge, only one of the materials usable in this capacity, has a first stiffness (x) and a second stiffness (2x - 5x) that is greater than the first stiffness. See col. 15, lines 40 - 52.

The examiner interprets stiffness as it is defined by Webster's Ninth New Collegiate Dictionary. Stiffness is defined as lacking in responsiveness or impeded in movement. In light of the foregoing, the examiner contends that both Weber and Glaug disclose a wetness indicator with a first dry stiffness and a second stiffness greater than the first because the delay in movement (i.e. absorption of fluids) in the wetness indicator is greater once liquid has been absorbed versus when the wetness indicator is dry.

The difference between Glaug and claim 25 is the provision that the wetness indicator is transversely positioned in the crotch area so as to provide a tactile sensation to the inner thighs of the wearer.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to position the wetness indicator transversely in the crotch area since it has been held that rearranging parts of an invention involves only routine skill in the art.

As to claim 26, Glaug discloses an article wherein the wetness indicator comprises a liquid permeable enclosure (52) and an absorbent body within the liquid permeable enclosure (82), said absorbent body being capable of expansion upon the absorption of the liquid body exudates thereby (col. 15, lines 40 – 53), said enclosure

limiting the expansion of the absorbent body whereby the wetness indicator stiffens as liquid body exudates are absorbed by the absorbent body.

Glaug discloses the sponge as a dimensional change member. The sponge, only one of the materials usable in this capacity, has a first stiffness (x) and a second stiffness (2x – 5x) that is greater than the first stiffness. See col. 15, lines 40 – 52. The examiner interprets stiffness as it is defined by Webster's Ninth New Collegiate Dictionary. Stiffness is defined as lacking in responsiveness or impeded in movement. In light of the foregoing, the examiner contends that Glaug discloses a wetness indicator that stiffens as liquid body exudates are absorbent because as fluids are absorbed the movement of the layer is impeded.

With reference to claim 27, Glaug discloses an article wherein the second stiffness is at least about five times greater than the first stiffness as se forth in col. 15, lines 48 – 52.

Glaug discloses the sponge as a dimensional change member. The sponge, only one of the materials usable in this capacity, has a first stiffness (x) and a second stiffness (2x - 5x) that is greater than the first stiffness. See col. 15, lines 40 - 52.

The examiner interprets stiffness as it is defined by <u>Webster's Ninth New Collegiate Dictionary</u>. Stiffness is defined as lacking in responsiveness or impeded in movement. In light of the foregoing, the examiner contends that Glaug discloses a wetness indicator with a first dry stiffness and a second stiffness greater than the first because the delay in movement (i.e. absorption of fluids) in the wetness indicator is greater once liquid has been absorbed versus when the wetness indicator is dry.

As to claim 28, Glaug discloses a garment wherein an unrestrained saturated volume of the liquid absorbent body is greater than the volume of the liquid permeable enclosure as set forth in col. 8, lines 19 – 35; col. 16, lines 28 – 30 and lines 56 – 59.

Glaug discloses that the liquid absorbent body may comprise expandable foams and compressed cellulose sponges while the liquid permeable enclosure may a tissue paper. The tissue paper, while permeable, will not significantly absorb any fluids. However, the cellulose or expandable foam will absorb and retain the fluids that it is exposed to thereby allowing the volume of liquid absorbent body to be greater than the volume of the permeable enclosure.

As to claim 31, see the rejection of claim 25.

(10) Response to Argument

Initially, the examiner notes that the applicant has appealed the rejection of claim 31, but has not provided arguments with respect to claim 31. The examiner thereby presumes that the applicant intends for dependent claim 31 to stand and/or fall with independent claim 12.

In response to the applicant's argument that Weber fails to show or suggest a wetness indicator having a liquid permeable enclosure with a liquid absorbent body therein configured such that the enclosure limits expansion of the absorbent body so that the wetness indicator stiffens as liquid is absorbed, the examiner disagrees.

Weber discloses a wetness indicator comprising a liquid permeable enclosure (40) having a liquid absorbent body (one uppermost layer of absorbent shown in first

peak of figure 4) therein, said liquid absorbent body absorbs liquid and as a result applies pressure (as a result of swelling at least 4 times its own weight) to the enclosure. The examiner notes that a preselected amount of liquid may include complete and total saturation of the article and/or any or all of the absorbent material therein. The wetness indicator (the second layer of absorbent under the uppermost layer of absorbent in the first peak of figure 4) has a first stiffness when dry (x) and a second stiffness greater than the first stiffness (4x or 4 times the dry stiffness) upon absorption of the preselected amount of liquid.

The examiner notes that the liquid permeable enclosure is considered to limit expansion because without the liquid permeable enclosure, the superabsorbent material would swell at least 4 times it weight when wetted and come into contact with the skin of the wearer. This would be undesirable to the wearer because it would give the wearer a "wet" feeling on the skin (col. 8, lines 9 – 11) and may produce an adverse reaction to the skin of wearer from coming in direct contact with the superabsorbent materials or any other additives that may be included in the peaks (col. 4, lines 30 - 35).

Further, an interior volume and an unrestrained volume do not necessarily include the total volume of each, respectively. An interior volume may be considered any volume smaller than any unrestrained volume which would ultimately result in the claimed limitations. Likewise, a pressure "to stiffen a peak" is functional and the examiner contends that the reference is fully capable of performing the recited function.

In response to the applicant's argument that Glaug fails to disclose that the sponge stiffens when liquid is absorbent, the examiner disagrees.

Glaug discloses the sponge as a dimensional change member. The sponge, only one of the materials usable in this capacity, has a first stiffness (x) and a second stiffness (2x - 5x) that is greater than the first stiffness. See col. 15, lines 40 - 52.

The examiner interprets stiffness as it is defined by Webster's Ninth New Collegiate Dictionary. Stiffness is defined as lacking in responsiveness or impeded in movement. In light of the foregoing, the examiner contends that both Weber and Glaug disclose a wetness indicator with a first dry stiffness and a second stiffness greater than the first because the delay in movement (i.e. absorption of fluids) in the wetness indicator is greater once liquid has been absorbed versus when the wetness indicator is dry.

In response to applicant's argument that the references fail to show or suggest a wetness indicator comprised of an enclosure and a liquid absorbent body having an unrestrained volume upon absorbing a preselected amount of liquid whereby the unrestrained volume of the liquid absorbent body is substantially greater than the volume of the enclosure so that upon expansion of the absorbent body within the enclosure the stiffness of the wetness indicator increases, the applicant is reminded that a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the

prior art. See *In re Casey*, 370 F.2d 576, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 312 F.2d 937, 939, 136 USPQ 458, 459 (CCPA 1963).

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the existence of a pocket) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Again the examiner notes with respect to interior volumes and unrestrained volumes that the volumes are not necessarily inclusive of a total volume of each. An interior volume may be considered any volume smaller than any unrestrained volume which would ultimately result in the claimed limitations.

In response to applicant's argument that the claimed invention solves different problems by stiffening, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Conferees:

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Supervisory Patent Examiner

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